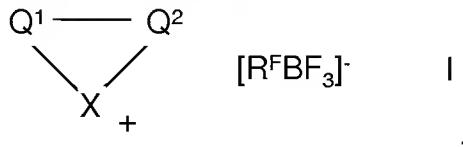


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) ~~Compounds~~ A compound of the formula IIa



in which

$X$  denotes  $\text{NR}^1$  or  $\text{N}(\text{R}^1)_2$ ,

$-Q^1-Q^2-$  denotes  $-\text{CHR}^3-\text{CHR}^4-\text{CHR}^5-\text{CHR}^6$ ,

$-\text{CR}^2=\text{CR}^3-\text{CR}^4=\text{CR}^5-\text{CR}^6=$  or

$-\text{CR}^7=\text{CR}^8-\text{NR}^{10}-\text{CR}^9=$ ,

$\text{R}^1$  in each case, independently of one another, denotes alkyl having 1-10 C atoms or  $-(\text{CH}_2)-\text{R}^{11}$ ,

$\text{R}^2\text{R}^3-\text{R}^6$  denote hydrogen or alkyl having 1-10 C atoms,

$\text{R}^7\text{R}^9$  denote hydrogen, alkyl having 1-10 C atoms or aryl,

$\text{R}^{10}$  denotes alkyl having 2-8 C atoms or  $(\text{CH}_2)-\text{R}^{11}$ ;

$\text{R}^{11}$  denotes perfluorinated or partially fluorinated alkyl having 1-8 C atoms; and

$\text{R}^F$  denotes perfluorinated alkyl having 2-8 C atoms; and

aryl denotes phenyl, perfluorinated phenyl, or phenyl or perfluorinated phenyl which is substituted by alkyl having 1-8 C atoms,

where the compounds

1-methyl-3-ethylimidazolium-pentafluoroethyltrifluoroborate, 1-methyl-3-ethylimidazolium-(n-heptafluoropropyl)trifluoroborate and 1-methyl-3-ethylimidazolium-(n-nonafluorobutyl)trifluoroborate are excluded.

2. (Canceled)

3. (Currently Amended) Compounds according to Claim 1, ~~wherein characterised in that~~ the substituents  $R^1$  are different.

4. (Canceled)

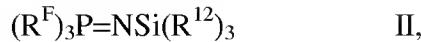
5. (Canceled)

6. (Canceled)

7. (Currently Amended) ~~Compounds~~ A compound according to claim 1, ~~characterised in that~~ wherein  $R^F$  denotes perfluoroethyl, perfluoropropyl or perfluorobutyl.

8. (Currently Amended) ~~Compounds~~ A compound according to Claim 1 which is:  
N-methyl-N-butylypyrrolidinium pentafluoroethyltrifluoroborate,  
N-methyl-N-hexylpyrrolidinium pentafluoroethyltrifluoroborate, or  
N-methyl-N-octylpyrrolidinium pentafluoroethyltrifluoroborate,  
~~1-methyl-3-butylimidazolium pentafluoroethyltrifluoroborate,~~  
~~1-methyl-3-hexylimidazolium pentafluoroethyltrifluoroborate,~~  
~~or 1,2-dimethyl-3-butylimidazolium pentafluoroethyltrifluoroborate.~~

9. (Currently Amended) ~~Process~~ A process for the preparation of a ~~compounds~~ compound according to claim 1, ~~characterised in that~~ in the first step, ~~comprising reacting~~ a compound of the formula II

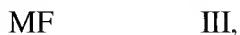


in which

$R^F$  in each case, independently of one another, denotes perfluorinated alkyl having 2-8 C atoms, and

$R^{12}$  in each case, independently of one another, denotes alkyl having 1-8 C atoms, alkoxy having 1-8 C atoms, cycloalkyl having 3-7 C atoms, halogen or aryl,

~~is reacted~~ with a fluoride of the formula III



in which

M is ammonium, alkali metal or alkaline earth metal or a metal from group 11 or 12,

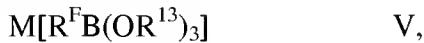
and a boric acid ester of the formula IV



in which

$R^{13}$  in each case, independently of one another, denotes alkyl having 1-8 C atoms or aryl,

and ~~the~~ reacting a resultant salt of the formula V



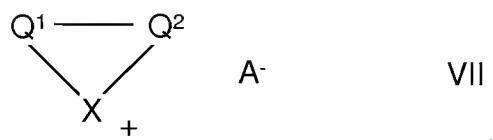
in which M,  $R^F$  and  $R^{13}$  have one of the above-mentioned meanings,  
~~is reacted, in the second step, with HF,~~

and ~~the~~ reacting a resultant salt of the formula VI



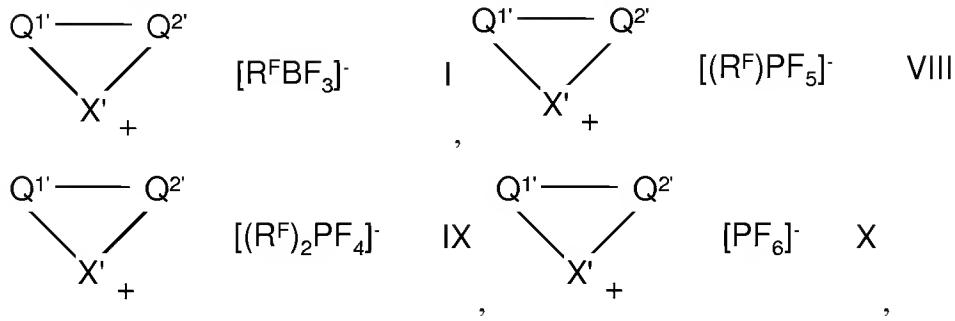
in which  $R^F$  is as defined above,

~~is reacted, in the third step, with a compound of the formula VII~~



in which X and  $-Q^1-Q^2-$  are as defined for the formula I in ~~Claims 1 to 6~~, and  
 $A^-$  denotes alkylsulfate, alkylsulfonate, trifluoromethanesulfonate, tetrafluoroborate, acetate, trifluoroacetate, bis(perfluoroalkyl)phosphinate,  $F^-$ ,  $HF_2^-$ ,  $Cl^-$ ,  $Br^-$  or  $I^-$ .

10. (Currently Amended) ~~Mixture~~ Mixture of the salts at least one salt of the formula I with ~~at least one salt~~ salt of the formulae VIII, IX and X.



where

$X$ ,  $-Q^1-Q^2-$  and  $R^F$  have the meaning indicated in Claim 1,

$X'$  is  $NR^1$  or  $N(R^1)_2$ ,

$Q^1-Q^2-$  denotes  $-CHR^3-CHR^4-CHR^5-CHR^6-$ ,

$\underline{-CR^2=CR^3-CR^4=CR^5-CR^6=}$  or

$\underline{-CR^7=CR^8-NR^{10}-CR^9=}$ ,

$R^2-R^6$  denote hydrogen or alkyl having 1-10 C atoms,

$R^7-R^9$  denote hydrogen, alkyl having 1-10 C atoms or aryl,

$R^{10}$  denotes alkyl having 2-8 C atoms or  $-(CH_2)-R^{11}$ , aryl

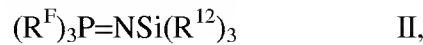
denotes phenyl, perfluorinated phenyl, or phenyl or perfluorinated phenyl which is substituted by alkyl having 1-8 C atoms.

11. (Currently Amended) ~~Mixture~~ Mixture according to Claim 10, characterised in that it ~~comprises~~ comprising 50-75 mol% of compounds of the formula I and 25-50 mol% of compounds of the formulae VIII, IX and/or X, where  $X$ ,  $-Q^1-Q^2-$  and  $R^F$  denotes perfluorinated alkyl having 2-8 C atoms.

12. (Currently Amended) ~~Use of the compounds according to Claim 1 as~~ An ionic liquid containing a compound according to Claim 1.

13. (Canceled)

14. (Currently Amended) A compoundCompounds of the formula II



in which

$R^F$  in each case, independently of one another, denotes perfluorinated alkyl having 1-8 C atoms, and

$R^{12}$  in each case, independently of one another, denotes alkyl having 1-8 C atoms, alkoxy having 1-8 C atoms, cycloalkyl having 3-7 C atoms, halogen or aryl.

15. (Currently Amended) A compoundCompounds according to Claim 14,

characterised in thatwherein  $R^F$  denotes perfluorinated C<sub>1</sub>-C<sub>4</sub>-alkyl.

16. (Currently Amended) A compoundCompounds according to Claim 14,

characterised in thatwherein all three substituents  $R^F$  are identical.

17. (Currently Amended) A compoundCompounds according to Claim 14,

characterised in thatwherein  $R^{12}$  in each case, independently of one another, denotes alkyl having 1-8 C atoms.

18. (Canceled)